

NOAA and NOAA Partnership Stations Relative to the Storm 08/06/14 2 AM 08/05/14 2 AM 08/04/14/2,AM San Juan, PR Esperanza, Viegues Island, PR 08/03/14/2⁻AM Charlotte Amalie, VI Mona Island, PR Lime Tree Bay, VI Magueyes Island, PR Yabucoa Harbor, PR 08/02/14 2 PM 08/02/14 2 AM 08/01/14 2 PM Active Stations 08/01/14/5 AM Extent TS Force Winds

Storm Analysis

As of 08/01/2014 07:00 AST, water levels in the Eastern half of Puerto Rico are .15 to .25 feet above tidal predictions. In the Western half of Puerto Rico water levels are .25 to .50 feet above tidal predictions. Water levels in the Virgin Islands are only about .15 to .25 feet above tidal predictions. Wind speeds are 5 to 10 knots across the region gusting up to 15 knots at the moment. Barometric pressure is mostly steady only dropping a couple millibars.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst: ADW	

TROPICAL STORM BERTHA ADVISORY NUMBER 2 NWS NATIONAL HURRICANE CENTER MIAMI FL AL032014 500 AM AST FRI AUG 01 2014

...BERTHA CONTINUES TOWARD THE LESSER ANTILLES AND THE NORTHEASTERN CARIBBEAN SEA...

...TROPICAL STORM WARNINGS ISSUED FOR PUERTO RICO AND ADJACENT ISLANDS...

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY...

A TROPICAL STORM WARNING HAS BEEN ISSUED FOR PUERTO RICO...VIEQUES...CULEBRA AND THE U.S. VIRGIN ISLANDS.

THE GOVERNMENT OF ANTIGUA AND BARBUDA HAS ISSUED A TROPICAL STORM WARNING FOR THE BRITISH VIRGIN ISLANDS.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- * BARBADOS
- * ST. LUCIA
- * DOMINICA
- * PUERTO RICO
- * VIEOUES
- * CULEBRA
- * U.S. VIRGIN ISLANDS
- * BRITISH VIRGIN ISLANDS

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA...IN THIS CASE WITHIN THE NEXT 24 HOURS.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA...GENERALLY WITHIN 48 HOURS.

INTERESTS ELSEWHERE ACROSS THE NORTHEASTERN CARIBBEAN SEA AND HISPANIOLA SHOULD MONITOR THE PROGRESS OF THIS SYSTEM.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 500 AM AST THE CENTER OF TROPICAL STORM BERTHA WAS ESTIMATED ABOUT 170 MI E OF BARBADOS AND ABOUT 295 MI ESE OF MARTINIQUE BERTHA IS MOVING TOWARD THE WEST-NORTHWEST NEAR 20 MPH AND THIS GENERAL MOTION IS EXPECTED TO CONTINUE FOR THE NEXT COUPLE OF DAYS. ON THE FORECAST TRACK...BERTHA IS EXPECTED TO PASS NEAR OR NORTH OF BARBADOS THIS AFTERNOON AND MOVE THROUGH THE CENTRAL LESSER ANTILLES TONIGHT...AND INTO THE NORTHEASTERN CARIBBEAN ON SATURDAY.

MAXIMUM SUSTAINED WINDS REMAIN NEAR 45 MPH WITH HIGHER GUSTS. NO SIGNIFICANT CHANGE IN STRENGTH IS FORECAST DURING THE NEXT 48 HOURS.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 45 MILES FROM THE CENTER.

THE ESTIMATED MINIMUM CENTRAL PRESSURE IS 1008 MB.

HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS ARE EXPECTED TO FIRST REACH THE WARNING AREA BY MIDDAY TODAY...MAKING OUTSIDE PREPARATIONS DIFFICULT OR DANGEROUS. TROPICAL STORM CONDITIONS ARE POSSIBLE IN THE WATCH AREA IN PUERTO RICO AND THE VIRGIN ISLANDS ON SATURDAY.

RAINFALL...BERTHA IS EXPECTED TO PRODUCE RAINFALL AMOUNTS OF 1 TO 3 INCHES WITH ISOLATED AMOUNTS UP TO 6 INCHES ACROSS PORTIONS OF THE LEEWARD ISLANDS...PUERTO RICO...AND THE VIRGIN ISLANDS THROUGH SATURDAY NIGHT.

NEXT ADVISORY

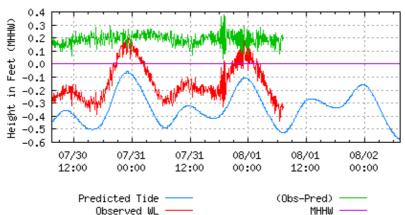
NEXT INTERMEDIATE ADVISORY...800 AM AST. NEXT COMPLETE ADVISORY...1100 AM AST.

FORECASTER AVILA

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: <u>Charlotte Amalie - Water Level</u>, <u>Charlotte Amalie - Winds</u>, <u>Charlotte Amalie - Barometric</u>, <u>Lime Tree Bay - Winds</u>, <u>Lime Tree Bay - Water Level</u>, <u>Esperanza</u>, <u>Vieques Island - Water Level</u>, <u>Esperanza</u>, <u>Vieques Island - Water Level</u>, <u>Yabucoa Harbor - Winds</u>, <u>Magueyes Island - Water Level</u>, <u>Magueyes Island - Winds</u>, <u>Mona Island - Water Level</u>, <u>Magueyes Island - Water Level</u>, <u>San Juan </u>

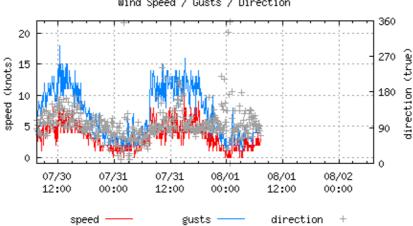
NOAA/NOS/CO-OPS <u>9751639 Charlotte Amalie</u>, VI Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/01/2014 07:18 (AST). Data relative to MHHW Observed: -0.34 ft. Predicted: -0.53 ft. Residual: 0.19 ft.

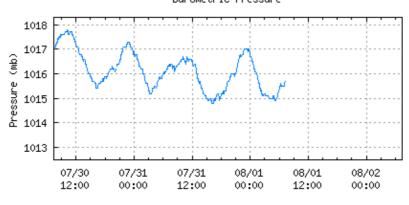
Historical Maximum Water Level: Sep 16 1995, 2.93 ft. Next High Tide: 08/01/2014 13:04 (AST), -0.27 ft.

NOAA/NOS/CO-OPS <u>9751639 Charlotte Amalie, VI</u> Wind Speed / Gusts / Direction



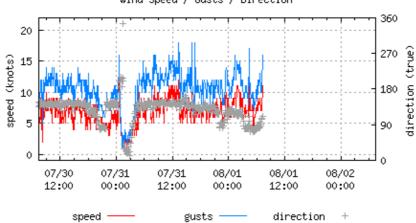
Last Observed Sample: 08/01/2014 07:18 (AST) Wind Speed: 2 knots Gusts: 5 knots Direction: 72° T

NOAA/NOS/CO-OPS <u>9751639 Charlotte Amalie, VI</u> Barometric Pressure



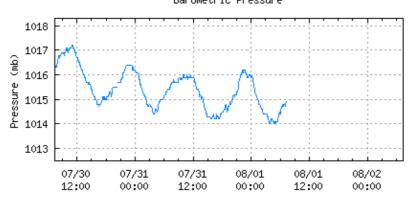
barometric pressure ——
Last Observed Sample: 08/01/2014 07:18 (AST)
Barometric Pressure: 1015.7 mb

NOAA/NOS/CO-OPS <u>9751401 Lime Tree Bay, VI</u> Wind Speed / Gusts / Direction



Last Observed Sample: 08/01/2014 07:18 (AST) Wind Speed: 11 knots Gusts: 15 knots Direction: 117° T

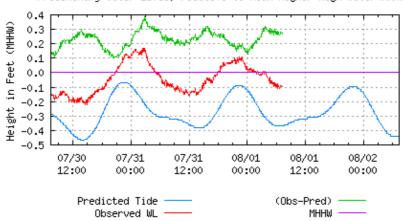
NOAA/NOS/CO-OPS <u>9751401 Lime Tree Bay, VI</u> Barometric Pressure



barometric pressure ——
Last Observed Sample: 08/01/2014 07:18 (AST)

Barometric Pressure: 1014.8 mb

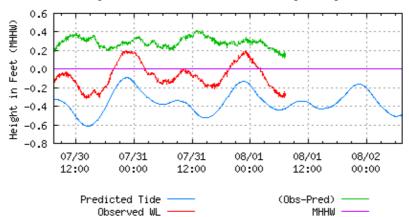
NOAA/NOS/CO-OPS <u>9751401 Lime Tree Bay, VI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/01/2014 07:18 (AST). Data relative to MHHW Observed: -0.11 ft. Predicted: -0.37 ft. Residual: 0.26 ft.

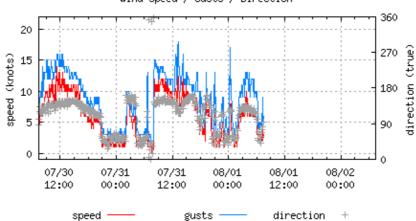
Historical Maximum Water Level: Nov 17 1999, 1.88 ft. Next High Tide: 08/01/2014 21:55 (AST), -0.10 ft.

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR Preliminary Water Level, relative to Mean Higher High Water(MHHW)



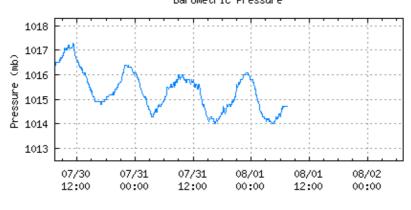
Last Observed Sample: 08/01/2014 07:24 (AST). Data relative to MHHW Observed: -0.23 ft. Predicted: -0.42 ft. Residual: 0.19 ft. Historical Maximum Water Level: Aug 22 2011, 0.99 ft. Next High Tide: 08/01/2014 10:40 (AST), -0.35 ft.

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR $_{\text{Wind}}$ Speed / Gusts / Direction



Last Observed Sample: 08/01/2014 07:24 (AST) Wind Speed: 3 knots Gusts: 6 knots Direction: 94° T

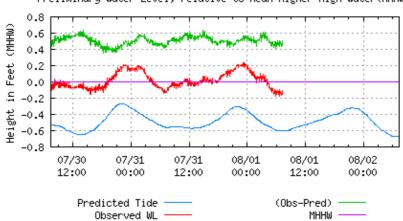
NOAA/NOS/CO-OPS <u>9752695 Esperanza, Vieques Island, PR</u> Barometric Pressure



barometric pressure ——
Last Observed Sample: 08/01/2014 07:24 (AST)
Barometric Pressure: 1014.7 mb

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NOAA/NOS/CO-OPS <u>9754228 Yabucoa Harbor, PR</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

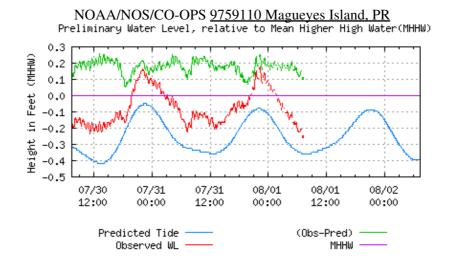


Last Observed Sample: 08/01/2014 07:18 (AST). Data relative to MHHW Observed: -0.16 ft. Predicted: -0.61 ft. Residual: 0.45 ft.

Historical Maximum Water Level: n/a Next High Tide: 08/01/2014 21:43 (AST), -0.32 ft.

NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR Wind Speed / Gusts / Direction 360 20 (true) 270 speed (knots) 15 direction 180 10 5 0 07/30 07/31 07/31 08/01 08/01 08/02 12:00 00:00 12:00 00:00 12:00 00:00 gusts direction speed -Last Observed Sample: 08/01/2014 07:18 (AST)

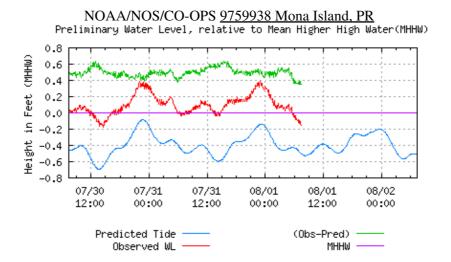
Wind Speed: 7 knots Gusts: 11 knots Direction: 66° T



Last Observed Sample: 08/01/2014 07:18 (AST). Data relative to MHHW Observed: -0.25 ft. Predicted: -0.36 ft. Residual: 0.11 ft. Historical Maximum Water Level: Sep 22 1998, 1.60 ft. Next High Tide: 08/01/2014 21:12 (AST), -0.09 ft.

NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR Wind Speed / Gusts / Direction 360 20 270 direction (true) speed (knots) 15 180 10 0 07/31 07/31 08/01 08/01 08/02 12:00 00:00 12:00 00:00 12:00 00:00 gusts direction speed -

Last Observed Sample: 08/01/2014 07:18 (AST) Wind Speed: 6 knots Gusts: 11 knots Direction: 106° T



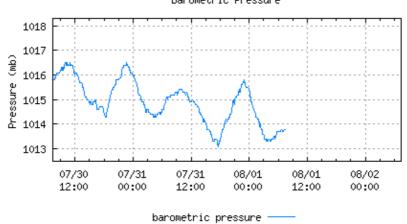
Last Observed Sample: 08/01/2014 07:24 (AST). Data relative to MHHW Observed: -0.15 ft. Predicted: -0.50 ft. Residual: 0.35 ft. Historical Maximum Water Level: Dec 23 2010, 1.26 ft. Next High Tide: 08/01/2014 11:57 (AST), -0.39 ft.

$NOAA/NOS/CO-OPS \underbrace{9759938\ Mona\ Island,\ PR}_{\texttt{NOAA}/\texttt{NOS}/\texttt{CO-OPS}}$

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Last Observed Sample: 08/01/2014 07:24 (AST) Wind Speed: n/a Gusts: n/a Direction: n/a

NOAA/NOS/CO-OPS <u>9759938 Mona Island, PR</u> Barometric Pressure



Last Observed Sample: 08/01/2014 07:24 (AST)

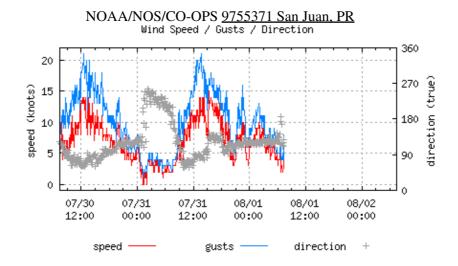
Barometric Pressure: 1013.8 mb

NOAA/NOS/CO-OPS 9755371 San Juan, PR Preliminary Water Level, relative to Mean Higher High Water(MHHW) 0.4 Height in Feet (MHHW) 0.2 0.0 -0.2 -0.4 -0.6 -0.8 -1.0 -1.2 -1.4 07/30 08/01 08/02 07/31 07/31 08/01 12:00 00:00 12:00 00:00 12:00 00:00 Predicted Tide (Obs-Pred)

Last Observed Sample: 08/01/2014 07:18 (AST). Data relative to MHHW Observed: -1.03 ft. Predicted: -1.24 ft. Residual: 0.21 ft. Historical Maximum Water Level: Sep 18 1989, 2.77 ft. Next High Tide: 08/01/2014 12:46 (AST), -0.32 ft.

MHHW

Observed WL



Last Observed Sample: 08/01/2014 07:18 (AST) Wind Speed: 6 knots Gusts: 8 knots Direction: 128° T

NOAA/NOS/CO-OPS 9755371 San Juan, PR

Barometric Pressure 1018 1017 Pressure (mb) 1016 1015 1014 1013 07/31 12:00 07/30 12:00 07/31 00:00 08/01 08/01 08/02 00:00 12:00 00:00

barometric pressure ——

Last Observed Sample: 08/01/2014 07:18 (AST)
Barometric Pressure: 1014.6 mb

Latest Water Level Observations on MHHW

Station II	Station Name	Date/Time	Observed Water Level	l Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
9751639	Charlotte Amalie, VI	08/01/2014 07:18 (AST)	-0.34 ft	-0.53 ft	0.19 ft	0.18 ft
9751401	Lime Tree Bay, VI	08/01/2014 07:18 (AST)	-0.11 ft	-0.37 ft	0.26 ft	0.11 ft
9752695	Esperanza, Vieques Island, PR	08/01/2014 07:24 (AST)	-0.23 ft	-0.42 ft	0.19 ft	0.20 ft
9754228	Yabucoa Harbor, PR	08/01/2014 07:18 (AST)	-0.16 ft	-0.61 ft	0.45 ft	0.23 ft
9759110	Magueyes Island, PR	08/01/2014 07:18 (AST)	-0.25 ft	-0.36 ft	0.11 ft	0.17 ft
9759938	Mona Island, PR	08/01/2014 07:24 (AST)	-0.15 ft	-0.50 ft	0.35 ft	0.39 ft
9755371	San Juan, PR	08/01/2014 07:18 (AST)	-1.03 ft	-1.24 ft	0.21 ft	-0.03 ft

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